**Supplementary Table S1**. Allotment of dairy cows by breed and system 1.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Ext2 | |  | Semi2 | |  | *P*–value | | |
| Hols3 | Mont3 |  | Hols4 | Mont4 |  | | Breed | System |
| n total | 12 | 12 |  | 12 | 10 | - | | - | - |
| Primiparous | 2 | 3 |  | 3 | 2 |  | | - | - |
| Multiparous | 10 | 9 |  | 9 | 8 |  | | ~~-~~ | ~~-~~ |
| Lactation number 4 | 2.9 (± 1.7) | 2.7 (± 1.8) |  | 2.7  (± 1.4) | 3.1  (± 1.9) |  | | 0.67 | 0.91 |
| Age at calving (years) | 5.2  (± 2.0) | 5.5 (± 1.9) |  | 4.6 (± 2.0) | 5.3 (± 2.1) |  | | 0.41 | 0.50 |
| Primiparous cows | 3.4 (± 0.2) | 3.3 (± 0.2) |  | 2.3 (± 0.1) | 2.5 (± 0.1) |  | | 0.50 | < 0.001 |
| Multiparous cows | 5.5 (± 2.0) | 6.2 (± 1.6) |  | 5.4 (± 1.6) | 6.0 (± 1.7) |  | | 0.28 | 0.77 |
| BCS at week -4 | 2.52 (± 0.35) | 2.61 (± 0.37) |  | 2.62 (± 0.37) | 2.37 (± 0.46 ) |  | | 0.54 | 0.60 |
| Primiparous cows | 2.88 (± 0.00) | 2.71 (± 0.71) |  | 2.29 (± 0.19) | 2.01 (± 0.18) |  | | 0.40 | 0.04 |
| Multiparous cows | 2.45 (± 0.34) | 2.57 (± 0.23) |  | 2.72 (± 0.36) | 2.46 (± 0.46) |  | | 0.62 | 0.44 |
| BW at week -4 | 731 (± 57) | 711 (± 50) |  | 723 (± 94) | 722 (± 55) |  | | 0.58 | 0.91 |
| Primiparous cows | 726 (± 50) | 704 (± 52) |  | 620 (± 28) | 644 (± 14) |  | | 0.96 | 0.01 |
| Multiparous cows | 732 (± 60) | 713 (± 52) |  | 758 (± 82) | 741 (± 41 ) |  | | 0.38 | 0.19 |
| Calving date | 4-May-11 (± 30) | 11-May-11 (± 21) |  | 10-May-11 (± 33) | 27-Apr-11 (± 14) |  | | 0.74 | 0.65 |
| DIM at pasture turnout | -12 (±31) | -19 (± 22) |  | -25 (±33) | -12 (±14) |  | | 0.73 | 0.66 |
| 1 Values are means and standard deviations.  2 Extensive (Ext) and semi-extensive (Semi) production system.  3 Holstein-Friesian (Hols) and Montbéliarde (Mont).  4 During current lactation. | | | | | | | | | |